

## ABSTRACT

System and method for sensing one or more occupant characteristics of a vehicle occupant in which an electromagnetic energy signal is transmitted toward an occupant location within a vehicle and absorption of the energy signal by a vehicle occupant is detected, if such absorption occurs. An absorption signal indicative of the absorbed energy signal is detected and processed to determine the occupant characteristic(s). Occupant characteristics include the presence or absence of an occupant, size, location, biometric features such as a voice print, a hand print, a finger print, an iris scan and a facial feature, and type, e.g., a child seat. The occupant characteristic may be used to control a vehicular component such as an occupant protection device.

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